

# Claims

- [c1] 1. A marine mooring line vermin shield to prevent the passage of vermin crawling along a marine mooring line from land to a pleasure craft, comprising:
- (a) a disc having a disc axial axis perpendicular to a face of said disc, the disc axial axis being positioned in a central portion of said disc, said disc also includes an aperture through said disc coincident to the disc axial axis being positioned such that said aperture uses the disc axial axis as a centerline, said aperture is sized and configured as a passage for the marine mooring line, said disc also includes a radial slot through said disc coincident to the disc axial axis, said radial slot extending from said aperture to a periphery of said disc, said slot having a radial axis parallel to said slot;
  - (b) a closure sized and adapted to insert into said slot in a closure pivotal movement arc approximately parallel to the disc axial axis, said closure is in a closed state when inserted into said slot and is substantially flush with said disc face, said closure also sized and adapted to manually extract from said slot in the closure pivotal movement arc approximately parallel to the disc axial axis, said closure is in an open state when extracted from said

slot to allow the marine mooring line to pass through said slot from said periphery to said aperture, said closure including a first end substantially flush with said disc periphery when said closure is in the closed state, said closure also including an opposing second end adapted to partially compress the mooring line against said aperture when said closure is in the closed state, wherein said disc resists axial movement along the mooring line when said closure is in the closed state with said disc face generally perpendicular to a mooring line axial axis; and

(c) means for urging said closure from the open state to the closed state.

- [c2] 2. A marine mooring line vermin shield according to claim 1 wherein said disc is constructed of a material with a mass density less than water such that said marine mooring line vermin shield floats in water.
- [c3] 3. A marine mooring line vermin shield according to claim 2 wherein said disc is constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.
- [c4] 4. A marine mooring line vermin shield according to claim 1 wherein said closure is constructed of a corrosion resistant material.

- [c5] 5. A marine mooring line vermin shield according to claim 1 further comprising a lockable element to secure said closure in the closed state.
- [c6] 6. A marine mooring line vermin shield according to claim 5 wherein said lockable element is constructed of a corrosion resistant material.
- [c7] 7. A marine mooring line vermin shield according to claim 1 wherein said disc face is a smooth substantially continuous surface with the exception of the marine mooring line protruding therefrom, when said closure is in the closed state, wherein the vermin encounters said disc face while crawling along the mooring line to help prevent passage of the vermin beyond said disc face.
- [c8] 8. A marine mooring line vermin shield according to claim 1 wherein said disc face has an area for placement of a pleasure craft registration number.
- [c9] 9. A marine mooring line vermin shield according to claim 1 wherein said means for urging said closure is pivotally oriented substantially parallel to the slot radial axis.
- [c10] 10. A marine mooring line vermin shield according to claim 9 further comprising a rod with a pivotal axis that

is oriented substantially parallel to the slot radial axis.

- [c11] 11. A marine mooring line vermin shield according to claim 10 further comprising a spring element.
- [c12] 12. A marine mooring line vermin shield according to claim 11 wherein said rod and spring element are constructed of a corrosion resistant material.
- [c13] 13. A marine mooring line vermin shield according to claim 1 wherein said closure second end is sized and configured to removably engagably receive an optional aperture insert.
- [c14] 14. A marine mooring line vermin shield according to claim 13 further comprising an aperture insert that is operational to be removably engagably received into said closure second end.
- [c15] 15. A marine mooring line vermin shield according to claim 14 further comprising a plurality of aperture inserts that are operational to accommodate different sizes of mooring lines.
- [c16] 16. A marine mooring line vermin shield according to claim 14 wherein said closure second end and said aperture insert engage one another in a singular positional orientation.

[c17] 17. A marine mooring line vermin shield according to claim 14 wherein said closure second end and said aperture insert further comprise a means for removably interlocking said aperture insert on said closure second end.

[c18] 18. A marine mooring line vermin shield according to claim 17 wherein said means for removably interlocking said aperture insert on said closure second end is accomplished by said closure second end including a female frustroconical segment terminating in a radial retainer that is in communication with a closure second end axial guide surface, with said aperture insert including a matingly removably engagable male frustroconical segment terminating in a radial retainer that is in the form of an ear relative to said aperture insert, wherein said female frustroconical segment terminating in a radial retainer and said male frustroconical segment terminating in a radial retainer are removably interlockable, being operational to removably retain said aperture insert on said closure second end.

[c19] 19. A marine mooring line vermin shield according to claim 18 further comprising a fastener between a closure second end female frustroconical shoulder and said male frustroconical segment, being operational to further re-

tain said aperture insert on said closure second end.

[c20] 20. A method of using a marine mooring line vermin shield to prevent the passage of vermin crawling along a marine mooring line from land to a pleasure craft, comprising the steps of:

- (a) providing a marine mooring line vermin shield that includes a disc, with an aperture, and a slot, also a closure, an aperture insert, a lockable element, and a means for urging said closure to insert into said slot resulting in said closure being in a closed state;
- (b) extracting said closure from said slot to place said closure in an open state by manually overcoming said means for urging;
- (c) ascertaining the size of the mooring line;
- (d) engaging said aperture insert into said closure if required based upon the size of the mooring line;
- (e) positioning said slot to allow the marine mooring line to pass through said slot and to rest against said aperture such that said disc is positioned so that a substantially flush disc face faces the land; and
- (f) allowing said means for urging closure to insert said closure into said slot placing said closure in the closed state, wherein said closure compresses the marine mooring line against said aperture to secure said marine mooring line vermin shield against axial movement on

the marine mooring line.

- [c21] 21. A method of using a marine mooring line vermin shield according to claim 20 further comprising a step of locking said closure in the closed state after said step (f) using said lockable element.
- [c22] 22. A method of using a marine mooring line vermin shield according to claim 20 wherein said step of positioning includes an axial positioning of said aperture on the mooring line at an axial axis mooring line approximate midpoint between a mooring line cleat on the pleasure craft and a dock cleat.
- [c23] 23. A method of using a marine mooring line vermin shield according to claim 20 wherein said step of positioning includes an axial positioning of said aperture on the mooring line at an axial axis mooring line approximate midpoint between a mooring line cleat on the pleasure craft and an anchor on a shoreline.
- [c24] 24. A method of using a marine mooring line vermin shield according to claim 20 wherein said step of providing said marine mooring line vermin shield further comprises a plurality of aperture inserts to be selected from based upon mooring line size if required.
- [c25] 25. A method of using a marine mooring line vermin

shield according to claim 24 wherein said step of engaging further comprises engaging a selected aperture insert into said closure if required based upon the size of the mooring line.